DUAL ROLE ADVISORS AND CONFLICTS OF INTEREST

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Abstract

A dual role advisor is an investment bank that is advising the vendor client in an M&A transaction while simultaneously financing the bidder. I investigate whether dual role advising is good or bad for target shareholders through a comprehensive analysis of U.S. public M&A over the 15-year period from 1993 to 2008. Conflicts of interest are manifested through that deals which involve a dual role advisor are, compared to deals with no dual role advisors; (a) performed at lower premium, (b) more likely to be subject to a lawsuit, (c) feature lower merger advisor fees and (d) commensurate with higher announcement returns for bidders. Target firms with sound corporate governance practices are less likely to encounter dual role situations.

Keywords: dual role advisors, conflicts of interest, mergers and acquisitions

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1. Introduction

Recent U.S. court proceedings have put the spotlight on the practice by investment banks to sometimes comingle merger and acquisition (M&A) advice to a vendor client with that of lending to the bidder, so called dual role advising. A 2005 lawsuit dealt with the takeover of the toys manufacturer Toys "R" Us by private equity firm Kohlberg Kravis Roberts & Co (KKR). Credit Suisse First Boston (CSFB) acted as advisor to Toys "R" Us when KKR bought the company in an auction process. However, CSFB was also soliciting the role as financer to KKR. This dual role led to litigation by shareholders against the board of Toys "R" Us and CSFB for tilting the playing field in favor of KKR in the bidding contest but a Delaware court found no evidence that CSFB's actions improperly influenced the board's decision-making process. In a 2010 courtroom battle private equity firm Terra Firma sued Citigroup for having tricked them to overbid for record label EMI. Citigroup provided Terra Firma with debt to finance the takeover while simultaneously acting as advisor to the vendor. A New York jury however acquitted Citigroup from allegations that they had deceived Terra Firma in order to receive both debt financing fees and advisor fees from the vendor.

Though courts have thus found the practice of dual role advising to be compliant with law, the question still remains whether dual role advising in general creates or destroys value for the advisory client. On one hand being a dual role advisor could raise fears that the investment bank's advice to the seller throughout the bidding process is tainted by a desire on the part of the advisor to obtain additional fees from financing the successful bidder. For example, CSFB earned \$10 million in financing fees in addition to its \$7 million advisory fee in the Toys "R" Us transaction. On the other hand, recent findings by Povel and Singh (2010) on the related theme of stapled finance, where private equity houses request their advising banks to also make financing available for the bidder, has shown that investment banks performing a dual role can be a helpful or even necessary service for the vendor.

In this paper I contrast and analyze these two potential explanations for the occurrence of dual role advising. Dual role advising may be beneficial for the client, which in particular would be the case if financing were not readily available to any acquirer or only available at very unattractive terms. The selling advisor could then facilitate the transaction by offering financing. Against this stands the hypothesis that the dual role investment bank's advice to the seller in the bidding process is distorted by their desire to obtain additional fees from financing the successful bidder. Overall, I find support for the later hypothesis. Firstly, I find that that target firms with good corporate governance practices encounter slightly fewer dual role

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situations. The higher the score of corporate governance quality, as measured by the Brown and Caylor (2004, 2006) Gov-Score index, the lower is the prevalence of dual role advising. The main question addressed in this paper is how shareholder gains are affected when the investment bank who is advising a client is also involved with financing the bidder, either as direct lender or as underwriter of securities. After controlling for a range of firm and transaction specific features, I find that the average deal premium - measured as the offer price over the share price one month prior to deal announcement is 12.0 percentage points (pp.) lower for dual role deals compared to deals where there is no involvement of a dual role advisor. The results are significant at the 5% level and robust for premium measured over periods of one week and one day. Shifting to the other participant in a transaction I find that the bidding firm gains a cumulative abnormal return around the announcement day (CAR -1,+1) that is 1.9 pp. higher in deals with dual role advising compared to deals without. I further find that deals involving a dual role advisor are more often subject to lawsuits led by target shareholders than deals with no dual role advisors, which points to disproportionately deep shareholder discontent with deal terms in dual role deals. Moreover, the merger advising fees collected by dual role advisors are lower than for non-dual role advisors, which could be an effect of discontent shareholders paying their advisors relatively low fee percentages. These results suggest that stakeholders in a target firm should be very careful in scrutinizing the activities of their advisors and should demand full disclosure of which activities the advisor is planning to engage in with the bidding firms. Besides being the first paper that address dual lending from the perspective of an investment bank financing the bidder while simultaneously acting as advisor to the target, this paper contributes to the growing literature on conflicts of interest in M&A, which is detailed in the following section.

2. Hypothesis Development

To understand the potential effects that dual role advising may have, it is useful to establish that investment banks may behave in a way that the client did not foresee both because of the conflicting incentives they face but also because of outright unlawful behavior. The literature is rich in giving examples of both situations.

2.1 Related Literature

Kesner *et al.* (1994) study conflicts of interest arising from self-interested investment banking agents who do not properly perform their duties for clients. They find that advisors to acquirers generally receive larger compensation for acquisitions when their clients pay a higher premium, which could lead advisors to encourage overbidding. Lex and Sebenius (1986) go further and argue that misalignments of the goals of investment bankers and their clients are so omnipotent that bankers must choose between creating values for all parties or pursue opportunistic tactics that yield value primarily to themselves. On a less general level Calomiris and Singer (2004) examine all hostile takeovers over a ten-year period and find that advisors to the acquirer have often previously represented the takeover target in some way. They argue that the existence of overlapping relationships provides incentives for clients and investment banks to limit flows of private information about clients but find no evidence that the acquisition premium are significantly different in acquisitions where there may be a potential conflict. Much related, Ivashina et al. (2009) document that bank lending intensity within client networks has a positive effect on borrowing firms becoming takeover targets. In particular, they show that banks play a very important role as informal dispersers of information. Focusing on banks that have previously had a lending relationship with both the bidder and target they explore whether a potential motive for the transfer of information is because banks seek to earn fees on financing takeovers, but do not find any evidence supporting this hypothesis. Allen and Peristiani (2007) investigate the primary and secondary syndicated bank loan market to analyze the effect on pricing when the financial institution commingles syndicated lending with merger advisory services. Focusing on the connection between the acquirer's choice of merger advisor and future financing commitments from that advisor, they find evidence of under-pricing of syndicated bank loans in both the primary and secondary market. All in all their findings point to that loans priced at below market terms are offered by the acquirer's relationship bank advisor in order to win merger advisory business. Allen et al. (2004) study the role of both commercial and investment banks in providing merger advisory services. They argue that banks who provide both advice and financing to acquiring firms can be viewed as serving a certification function. This function may however be diminished by potential conflicts of interest. Whereas the certification effect dominates for target firms, conflicts of interest dominate the certification effect when banks are advisors to acquirers.

Associated with the issue of dual role advising is the practice of stapled financing. Though closely related, it is however not correct to view dual role advising and stapled financing as identical means of financing. Stapled finance is a loan commitment by the investment bank advising the seller in an M&A

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transaction. Anyone who wins a bidding contest may use the stapled finance, but is not obliged to do so. As described by Povel and Singh (2010), stapled finance is usually offered early in the bidding process and provides potential buyers with an estimate of how much they can borrow against the target's assets and cash. Thus, whereas an advisor may not become a dual role lender until long after a deal announcement is made, stapled financing is something that is clearly disclosed in the investment memorandum and available to all bidders. Povel and Singh (2010) derive important predictions that may well be relevant also in a dual role setting. In particular, they find that an optimally designed stapled package can benefit the seller, lender and buyer when there is at least one financial bidder (as opposed to strategic or industrial buyers) and the terms of the financing package are fixed before the bidding starts.

2.2 General Hypothesis Formulation

The recent court cases point to that the feature of a dual role advisor may be expected to be commensurate with a high degree of conflicts of interest between the advisor and shareholders of the target. The possibility that the investment bank's advice to the seller throughout a bidding process is stained by a desire to obtain additional fees from financing the successful bidder is the driving force of such conflicts. This standpoint implies that dual role lending is unconditionally bad for sellers but an alternative hypothesis, which is in line with the Povel and Singh (2010) findings on the related issue of stapled financing, would state that the financing from the selling advisor could in certain special cases actually increase the price. For a seller this would be the case if financing were not readily available to any acquirer or only available at very unattractive terms. The selling advisor could then facilitate the transaction by offering financing at a discount, for which the seller must compensate them. One could also conjure a scenario in which the seller benefits from a speedy sale process through that the diligence process and getting access to credit for buyers are greatly simplified. Dual role advisors could also possibly play a certification role similar to the one mentioned in Allen et al. (2004) or simply eliminate financing as a buyer's bargaining tool. To examine empirically whether dual role advising is commensurate with conflicts of interests, which lead to value destruction for target shareholders, or if it is a value-enhancing ingredient in a sale process I will turn to areas where either event may manifest itself. The most noticeable areas to investigate are shareholder premium and bidder returns but evidence may be found through indirect effects such as the likelihood of lawsuits or the level of advisor fees. The testable predictions and their expected coefficients for the base and alternative hypotheses are outlined in Figure 1.

[Figure 1 about here]

3. Data

M&A deals are compiled from the SDC M&A database over the 15-year period 1 July 1993 to 30 June 2008. All targets firms are publicly traded in the United States when bid for. No firms are allowed to be in bankruptcy at the time of the merger announcement and the bidder must acquire at least 50 percent of votes. To be able to explore any dual relationship status only deals which have been financed through external financing and where the financial advisor to the target or seller is known are included. This forces the exclusion of any deals that have been financed by a bidder's existing funds or credit lines. An advisor may be an investment bank hired specifically by the target to deliver a fairness opinion of the deal or a general advisor that in addition to an assessment of the transaction pricing performs supplementary services such as advice on the overall approach to the transaction, negotiating tactics and assistance with the assembly of a team of professional advisors.

The SDC M&A data do not always list the identity of the lender or provider of bidder financing. For deals where such information is missing, I manually search and extract information from SEC filings or the deal prospectuses and memoranda. This information is gathered from a variety of sources such as EDGAR, SDC New Issues database, Perfect Information Debt and Perfect Information Filings. For transactions where any key financial information is missing in the SDC database, information is manually added from the Compustat North America database. Bidder financing can come in a variety of sources such as direct lending, new credit facilities, underwriting of equity securities or underwriting of debt securities. Matching financing bank with advisors enables me to single out the dual role deals. Of the 1,023 transactions there are 97 (9.5%) cases where any of the dual role requirements are fulfilled. I search for documentation of financing up to one year after the deal announcement. Although a target advisor might prepare to try to be assigned a dual role far prior to a deal being announced, the actual existence of a dual role advisor situation may not arise until after the deal announcement. For example, in the Toys "R" Us case the dual role bank did not approach bidders with financing until after two months after the merger agreement was signed.

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4. Empirical Results and Analysis 4.1 Determinants of Dual Role Advising

Before turning to the possible impact of dual role advising, I first estimate the probability that such advising occurs using a probit model. Corporate governance is measured through the Gov-Score index, which is available for 478 of the transactions in my sample. For full details on the construction of Gov-Score and its 51 underlying components, see Brown and Caylor (2004, 2006). The strength of relations between the advisor and the target firm is measured as a percentage of the number of times the target has used the advisor as advisor in any M&A situation in the past 5 years using SDC data. The second column in Table 1 shows the marginal effects when the Gov-Score index is included in the regression. The higher the score of corporate governance quality, the lower is the prevalence of dual role advising. The coefficient, which is significant on the 1% level, indicates that the probability of dual role advising is decreasing with 3.0 pp. for each higher score point. Leverage has the opposite impact. The higher the target leverage, the more likely that dual role advising will occur. The coefficient is 4.2 pp. and statistically significant on the 1% level. The coefficient for previous interaction is negative but not statistically significant. Whether a bidder is friendly or hostile does not significantly affect the probability of dual role advising. Some further results of interest, which all are significant at the 5% level, relate to the number of competing bidders and the number of advisors. When competition is present in a takeover situation the prevalence of dual role advising is reduced by 10.4 pp. This result indicates that the more bidders, the less easy it is for the target advisor to control all events and secure both sides of a deal. We also see that the probability of dual role situations is increasing in the number of advisors that are hired.

[Table 1 about here]

4.2 Deal Premium

Table 2 presents results from OLS regressions with deal premium, defined as the percentage premium of offer price over target price one month, one week, and one day prior to deal announcement, as the dependent variable. After controlling for firm and deal characteristics, I find a negative, economically and on the 5% level statistically significant relation between a dual role advisor and deal premium. When the target advisor is a dual role advisor, one month deal premiums are 12.0 pp. lower compared to deals without a dual role advisor. Corresponding results for the one week and one day periods are 7.7 pp. and 7.3 pp. respectively. These results point to that dual role advisors' integrity in advising a target is infected by the prospects of the fees they might obtain on the buy side. Hogan (2006) suggest that conflicts of interest can be mitigated by the use of several advisors where the key role of one is to provide a fairness opinion. However, we see that the premium is actually decreasing by 1.8 pp. per advisor engaged by the target. This could indicate that the conflict-mitigating effect of employing several advisors is dominated by the free riding problems that arise when several agents are hired to perform largely the same or overlapping tasks. The results are also consistent with Kisgen et al. (2009) who find that fairness opinions do not affect deal outcomes when used by targets.

[Table 2 about here]

4.3 Lawsuits and Target Advisor Fees

It is well established that lawsuits related to M&A are very costly for firms for numerous reasons (e.g. Thompson and Thomas (2003), Gong et al. (2008)). In the first three columns of Table 3, I examine whether deals with a dual role advisor are more likely to be brought to court by shareholders than deals with no dual role advisors. A probit model with lawsuit as dependent variable on all remaining variables show that deals with dual role advisors are 3.0 pp. more likely to end up in court. The result is statistically significant on the 10% level. Clearly, the action by shareholders to file legal charges against the board for accepting a bid for the firm is a strong indication of discontent with the deal and deal terms. Although the effects are not very strong, the results do support the hypothesis that dual role advisors are a feature that brings with it costly conflicts of interest with shareholders.

Another approach to examining if dual role advisors give rise to conflicts of interest is to look at merger fees as a percentage of the transaction value paid to the target advisors. We see in the fourth column of Table 3 that dual role advisors on average receive 0.2 pp. lower fees. The coefficient

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is significant on the 10% level. This could be an indication of that the target shareholders are unhappy with their advisory performance and thus pay them less. Again, this points to a conflict between shareholders and dual role advisors. I will return to these results as they play an important role in discussing the alternative hypothesis of dual role advisors being a value-increasing feature in mergers.

[Table 3 about here]

4.4 Bidder Returns

The announcement returns for acquiring firms around the deal announcement has been studied extensively in the finance literature (see Boone and Mulherin (2008) for an overview). I study bidder returns with three day CAR around the acquisition announcement (-1, +1). CAR is computed using a market model with an estimation period from 180 trading days to 21 trading days prior to the announcement date. Table 4 displays results with the CAR as dependent variable. We see that mergers with a dual role advisor have better announcement returns than deals without dual role advisors. The CAR is 1.9 pp. and statistically significant on the 10% level. Thus, dual role advising seems to be bad for the target party and good for the bidding party.

[Table 4 about here]

4.5 Alternative Hypothesis

mentioned, alternative As previously an explanation for the use of dual role advisors is that they may be needed as financiers in deals that are, for one or the other reason, difficult to finance. If this is the case, then the results that premiums are lower in dual role deals would not necessarily mean that the net effect for target shareholders is negative compared to the counterfactual effect of a deal not talking place. To control for whether there are observable or unobservable differences in the data that could explain dual role advising within the alternative story, I would like to compare deals with similar characteristic. Since it is difficult to match the transactions directly based on multiple relevant characteristics, I first use propensity score matching, which reduces the multiple-dimension matching problem to that of a single-dimension. To control for unobservable characteristics I use an instrumental variable (IV) approach. For the propensity score I follow the methodology used in Giannetti and Ongena (2009) and Hellman et al. (2008) who use the matching techniques suggested by Rosenbaum and Rubin (1983). Algorithms for Stata estimation follow Becker and Ichino (2002). Using the probit model specified in Table 1 I estimate the propensity score that a firm in the sample encounters a dual role advisor. Since measures for the targets' level of corporate governance is only available for 478 transactions, the regression is estimated without including the Gov-Score index. The average effect of treatment on the treated is computed by matching each treatment observation (transaction with a dual role advisor) with non-dual role transactions of similar propensity score and taking the average difference between these matched transactions. I report four different methods of measuring the average effect in Table 5. Overall, we see that deals with dual role advisors consistently have lower premiums, higher probability of lawsuits and lower fees paid to advisors. Statistical significance varies across the various matching methods with the nearest neighbor matching standing out as yielding the weakest results. Statistically significant estimates for the one month premium vary from -12.2 pp. to -14.0 pp. Thus, controlling for observable differences in firm characteristic does not drive away the previously reported results that dual role advising is a feature that brings with it costly conflicts of interest with target shareholders.

In Table 3, we saw that there is an increased probability of lawsuits in dual role deals. These results hold also in the propensity score matching. Lawsuits are between 4.3 pp. and 5.2 pp. more likely when a dual role advisor is present compared to the control group of non-dual role advisor deals. As it is difficult to reconcile these results with the alternative explanation that dual role advising could be a good thing for target shareholders, they present strong evidence against the alternative story. In the related situation of stapled financing, Povel and Singh (2010) argue that for staples to be optimally provided the lender cannot expect to breakeven, but must be compensated by the seller for offering the loan. In the previous analysis of fees we saw that advisor fees are generally lower in dual role transactions than in other deals. This suggests that lenders do not receive special compensation for overly favorable loans. The propensity score estimates confirm that results hold after accounting for matching. Statistically significant results vary from -0.2 to -0.3 pp. Overall, the results in the propensity score analysis point to that the results obtained in the earlier regressions are not driven by observable differences between deals with dual role advisors compared to deals without.

[Table 5 about here]

The propensity score is based only on observable characteristics and cannot take into account any bias coming from unobservable heterogeneity between treatment and control groups. To directly address such bias, I need an instrument that does not directly affect deal premium but is correlated

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with the dual-role advising indicator. Inspired by Allen and Dudney (2010) who instrument the quality of a financial advisor with the mean advisor quality in the same state and year and whether the issuer used an advisor on the previous issue, I use as instrumental variable the mean occurrence of dual role advising in the same state and year of the transaction. The general occurrence of advisors that turn out to be dual role advisors in a given state and year should affect the likelihood that a transaction is performed with a dual role advisor, but should not affect the size of the premium paid in the transaction once the target firm has chosen the advisor. Thus, the instrument satisfies the exclusion restriction requirement. First- and second-stage regressions are reported in Table 6 where we see that the negative and significant impact of a dual role advisor on deal premium is robust in the premium regression after controlling for unobservable private information. Coefficients in the second stage regression are -18.47 pp., -11.84 pp. and -12.35 pp. for the one month, one week, and one day time periods. Results for one month and one day are significant on the 10% level. Finally, we can revisit the predicted outcomes in Figure 1 and conclude that the obtained results support the base hypothesis that dual role advising is bad for shareholders.

[Table 6 about here]

5. Conclusion

I study 1,023 US M&A over the period 1993 to 2008 and find that in deals where a bank engages in dual role advising, deal premiums are 12.0 pp. lower than in deals with no dual role advisor. Whereas sellers lose out, the bidding firm gains a CAR around the announcement day that is 1.9 pp. higher in deals with dual role advising compared to deals without. Furthermore, deals with dual role advisors are more likely to be taken to court by shareholders and the advisor fees are lower compared to non-dual role deals. Overall, the results do not support an alternative hypothesis that dual role lending is a helpful feature in transactions where it might be difficult to otherwise obtain bidding financing. Results hold after both propensity score matching and instrumental variable analysis.

Altogether, these results point to that dual role advisors hired by target firms may not have fulfilled their obligation of improving the pricing of the transaction. Being a dual role advisor appears to create costly conflicts of interests, which stem from that the advice to target shareholders and board is polluted by a desire on the part of the advisor to obtain additional fees from financing the successful bidder. Importantly, sound corporate governance practices in target firms is associated with fewer occurrences of dual role situations. The results suggest that selling firms and their boards should be very careful in scrutinizing the activities of their advisors and should demand full disclosure of which activities the advisor is planning to engage in with the bidding firm.

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Appendix

Variable	Description			
# Target/seller advisors	The numbers of advisors in total retained by target and /or seller.			
Acquirer-target same industry	Indicates if target and acquirer industries are classified at the same 2-digit			
	SIC level.			
Acquirer-target same state	Indicates if acquirer and target are incorporated in the same state.			
Bidder CAR	Cumulative abnormal returns from -1 to +1 with date 0 being the announcement date. Estimation period is -180 to -21 trading days.			
Competing bidders	Indicates if competing bids are announced after deal announcement.			
Dual role indicator	Indicates if bid is financed by the seller or target advisor.			
Fee ratio	The target/seller advisor fee as percentage of transaction value.			
Gov-score	Measure of the level of corporate governance obtained from Brown and			
	Caylor (2004, 2006).			
Hostile	Indicates if bid is hostile as indicated by SDC.			
Lawsuit	Indicates if bid is contested in a lawsuit as indicated by SDC.			
Ln(Target assets)	Natural log of total assets.			
Ln(Transaction value)	Natural log of transaction value.			
Premium	Offer price over the market price of stock for periods of one day, one week			
	and one month prior to the deal announcement.			
Previous interaction	Percentage of the number of times the target has used the advisor in an			
	M&A situation in the past 5 years.			
Target leverage	Target leverage is measured as the book value of total debt divided by the			
	book value of total assets.			
Target M/B	Market value of total assets divided by the book value of total assets.			
Target ROE	Target ROE is the last twelve-month net income over reported common equity.			
Target/seller advisor ranking	Three-tier ranking of advisors based on market value advised over the			
	sample period. Tier 1: advisors ranked 1-5, Tier 2: advisors ranked 6-15, Tier 3: advisors below rank 16.			

Figure 1. Testable Predictions

	Coefficient of dual role advisor		
	Base hypothesis	Alternative hypothesis	
Target shareholder returns	-	+	
Lawsuits	+	- / insignificant	
Bidder CAR	+	- / insignificant	
Advisor fees	_	+	

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Marginal probit coefficients	Dual role	Dual role advising		
Gov-score		-0.030***		
		(0.007)		
Target M/B	-0.001*	-0.002		
	(0.001)	(0.002)		
Previous interaction	-0.029	-0.070		
	(0.028)	(0.075)		
Target ROE	0.002	0.019		
C	(0.003)	(0.015)		
Target leverage	0.010***	0.042***		
	(0.003)	(0.014)		
Acquirer-target same state	0.020	0.035		
	(0.017)	(0.045)		
Acquirer-target same industry	-0.013	-0.005		
	(0.012)	(0.033)		
Hostile	-0.010	-0.014		
	(0.033)	(0.084)		
Competing bidders	-0.035**	-0.104**		
	(0.016)	(0.048)		
Target/seller advisor ranking	0.010**	0.032**		
c c	(0.005)	(0.013)		
Ln(Transaction value)	0.020***	0.018		
	(0.007)	(0.023)		
Ln(Target assets)	-0.005	-0.026		
	(0.007)	(0.022)		
# Target/seller advisors	0.019**	0.051**		
C C	(0.008)	(0.026)		
Consideration type fixed effects	Yes	Yes		
Bidder financing type fixed effects	Yes	Yes		
Year fixed effects	Yes	Yes		
Observations	1023	478		

Table 1. Determinants of Dual Role Advising

All variables as described in the Appendix. Standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

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OLS coefficients	1 month	1 week	1 day
Dual role indicator	-12.038**	-7.744**	-7.250**
	(5.627)	(3.444)	(3.604)
Target M/B	-0.794	-0.143	-0.127**
C	(0.922)	(0.091)	(0.050)
Target ROE	2.877	0.467	0.489*
	(3.118)	(0.330)	(0.281)
Target leverage	0.027	-0.045	-0.001
	(0.171)	(0.167)	(0.153)
Acquirer-target same state	2.722	-1.093	0.561
	(4.179)	(3.637)	(3.759)
Acquirer-target same industry	3.376	0.307	-0.183
	(4.916)	(2.424)	(2.231)
Hostile	8.263	9.884	12.530*
	(7.464)	(7.615)	(7.267)
Lawsuit	-5.054	-1.769	-0.591
	(7.396)	(8.634)	(8.683)
Competing bidders	2.269	5.065	3.590
	(6.161)	(4.296)	(4.566)
Target/seller advisor ranking	-0.428	0.089	0.312
	(1.295)	(0.828)	(0.686)
Ln(Transaction value)	5.376*	1.175	2.058
	(3.118)	(1.591)	(1.496)
Ln(Target assets)	-6.078**	-2.511*	-2.675**
	(2.484)	(1.312)	(1.246)
# Target/seller advisors	-1.832	-2.518	-2.131
	(2.333)	(1.690)	(1.732)
Constant	56.797***	54.634***	46.042***
	(12.172)	(11.700)	(9.280)
Consideration type fixed effects	Yes	Yes	Yes
Bidder financing type fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	1023	1023	1023
R-squared	0.09	0.10	0.08

Table 2.	Deal Pr	emium

All variables as described in the Appendix. Standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

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	Laws	uit (Marginal pr		Fees (OLS)
Dual role indicator	0.030*	0.031*	0.031*	-0.002*
	(0.024)	(0.024)	(0.024)	(0.001)
Target M/B	-0.000	-0.000	-0.000	0.000
-	(0.000)	(0.000)	(0.000)	(0.000)
Target ROE	0.000	0.000	0.000	0.000
	(0.002)	(0.002)	(0.002)	(0.000)
Target leverage	-0.000	-0.000	-0.000	-0.001**
	(0.000)	(0.000)	(0.000)	(0.000)
Acquirer-target same state	0.009	0.009	0.009	0.003
	(0.012)	(0.012)	(0.012)	(0.003)
Acquirer-target same industry	-0.001	-0.001	-0.001	0.001
	(0.008)	(0.008)	(0.008)	(0.001)
Hostile	0.047	0.046	0.045	0.001
	(0.051)	(0.050)	(0.050)	(0.002)
Lawsuit				-0.004
				(0.004)
Competing bidders				-0.004
				(0.004)
Premium 1 month prior to announcement	-0.000			
	(0.000)			
Premium 1 week prior to announcement		0.000		
		(0.000)		
Premium 1 day prior to announcement			0.000	
			(0.000)	
Target/seller advisor ranking	0.003	0.003	0.003	0.002***
	(0.003)	(0.003)	(0.003)	(0.001)
Ln(Transaction value)	-0.003	-0.003	-0.003	-0.005
	(0.004)	(0.004)	(0.004)	(0.007)
Ln(Target assets)	-0.000	-0.000	0.000	0.003**
	(0.004)	(0.004)	(0.004)	(0.001)
# Target/seller advisors	-0.005	-0.004	-0.004	0.002
	(0.007)	(0.007)	(0.007)	(0.001)
				0.007
				(0.005)
Consideration type fixed effects	Yes	Yes	Yes	Yes
Bidder financing type fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1023	1023	1023	1023
All variables as described in the Appendix. Sta	ndard errors in pa	rentheses. * sig	nificant at 10%	; ** significan
5%; *** significant at 1%.	-	-		

Table 3. Lawsuits and Fees

VIRTUS

OLS coefficients	Bidder CAR			
Dual role indicator	0.019*	0.019*	0.019*	
	(0.011)	(0.010)	(0.011)	
Premium 1 month prior to announcement	-0.000**			
-	(0.000)			
Premium 1 week prior to announcement		-0.000		
-		(0.000)		
Premium 1 day prior to announcement			-0.000	
			(0.000)	
Γarget M/B	-0.001	-0.000	-0.000	
	(0.000)	(0.000)	(0.000)	
Target ROE	0.001	-0.003	-0.003	
	(0.005)	(0.006)	(0.006)	
Farget leverage	0.000	0.000	0.000	
	(0.000)	(0.000)	(0.000)	
Acquirer-target same state	0.010	0.008	0.008	
	(0.010)	(0.010)	(0.010)	
Acquirer-target same industry	0.007	0.006	0.006	
	(0.007)	(0.007)	(0.007)	
Hostile	-0.013	-0.013	-0.013	
	(0.021)	(0.021)	(0.022)	
Ln(Transaction value)	-0.006	-0.007	-0.007	
· · · ·	(0.005)	(0.005)	(0.005)	
Ln(Target assets)	-0.004	-0.003	-0.003	
	(0.006)	(0.006)	(0.006)	
Constant	0.110	0.110	0.108	
	(0.069)	(0.071)	(0.072)	
Consideration type fixed effects	Yes	Yes	Yes	
Bidder financing type fixed effects	Yes	Yes	Yes	
Year fixed effects	Yes	Yes	Yes	
Observations	468	468	468	
R-squared	0.14	0.13	0.13	

Table 4. Bidder CAR

All variables as described in the Appendix. Standard errors in parentheses. * significant at 10%; ** sig at 5%; *** significant at 1%.

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	1 month premium	1 week premium	1 day premium	Lawsuits	Fees
Nearest-neighbor	-6.521	-5.893	-4.330	0.052*	-0.000
	(14.447)	(7.110)	(4.495)	(0.028)	(0.001)
Radius	-12.222***	-9.808**	-7.843**	0.036	-0.003***
	(3.867)	(4.013)	(3.528)	(0.032)	(0.001)
Gaussian kernel	-14.001***	-9.288**	-7.014**	0.043*	-0.002***
	(5.092)	(4.063)	(3.573)	(0.024)	(0.000)
Stratification	-13.323***	-8.957**	-8.053*	0.045	-0.001*
	(4.837)	(3.809)	(4.525)	(0.03)	(0.000)

Table 5. Propensity Score Analysis

Propensity score is estimated using a probit model with the dependant variable taking the value one if the deal included a dual role advisor (treatment) and zero otherwise. All independent variables are as described in the Appendix. 22 blocks of equal score range is used and the analysis is restricted to the common support. Balancing tests are performed at the significance level 0.005. Matching is performed using Nearest-neighbor with equal weight (matching on the closest propensity score), Radius (matching on propensity score that falls into a neighborhood of 0.1), Gaussian kernel (matching with weights that are inversely proportional to the distance between the propensity scores of treated and controls), and Stratification (dividing the range of variation of the propensity score). Bootstrapped two tailed standard errors in parentheses, * significant at 10%; ** significant at 1%.

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		1 month	1 week	1 day
	1 st stage	2 nd stage	2 nd stage	2 nd stage
Dual role indicator		-18.473*	-11.840	-12.346*
		(10.857)	(7.658)	(6.577)
Target M/B	-0.002*	-0.811***	-0.154	-0.140
-	(0.001)	(0.208)	(0.146)	(0.126)
Target ROE	0.001	2.884***	0.471	0.494
	(0.004)	(0.782)	(0.552)	(0.474)
Target leverage	0.001	0.032	-0.042	0.003
	(0.001)	(0.195)	(0.137)	(0.118)
Acquirer-target same state	0.018	2.852	-1.010	0.664
	(0.020)	(4.561)	(3.217)	(2.763)
Acquirer-target same industry	-0.007	3.292	0.254	-0.249
	(0.015)	(3.444)	(2.429)	(2.086)
Hostile	-0.007	8.154	9.815	12.443*
	(0.049)	(10.870)	(7.667)	(6.586)
Lawsuit	0.025	-4.417	-1.364	-0.087
	(0.043)	(9.675)	(6.824)	(5.861)
Competing bidders	-0.076*	1.932	4.851	3.323
· •	(0.044)	(9.901)	(6.984)	(5.999)
Target/seller advisor ranking	0.012*	-0.330	0.151	0.390
-	(0.007)	(1.471)	(1.038)	(0.891)
Ln(Transaction value)	0.019**	5.552***	1.288	2.198*
	(0.009)	(1.967)	(1.387)	(1.192)
Ln(Target assets)	-0.002	-6.086***	-2.517*	-2.682**
	(0.009)	(1.904)	(1.343)	(1.154)
# Target/seller advisors	0.040***	-1.544	-2.335	-1.903
-	(0.013)	(2.921)	(2.060)	(1.770)
Average occurrence of dual role	0.939***			
advisors per state & year	(0.046)			
Constant	-0.198***	55.640***	53.898***	45.126***
	(0.075)	(16.923)	(11.937)	(10.253)
Consideration type fixed effects	Yes	Yes	Yes	Yes
Bidder financing type fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1023	1023	1023	1023
R-squared	0.39	0.09	0.10	0.08

Table 6. Instrumental Variable: Dual Role Advisors Impact on Deal Premium

All variables as described in the Appendix. Standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

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